

Journal Writing as a Teaching Technique to Promote Reflection

Stacy E. Walker

Ball State University, Muncie, IN

Stacy E. Walker, PhD, ATC, provided conception and design; acquisition and analysis and interpretation of the data; and drafting, critical revision, and final approval of the article.

Address correspondence to Stacy E. Walker, PhD, ATC, Ball State University, School of Physical Education, Sport, and Exercise Science, Muncie, IN 47306. Address e-mail to sewalker@bsu.edu.

Objective: To introduce the process of journal writing to promote reflection and discuss the techniques and strategies to implement journal writing in an athletic training education curriculum.

Background: Journal writing can facilitate reflection and allow students to express feelings regarding their educational experiences. The format of this writing can vary depending on the students' needs and the instructor's goals.

Description: Aspects of journal writing assignments are discussed, including different points to take into account before assigning the journals. Lastly, various factors to contemplate

are presented when providing feedback to the students regarding their written entries.

Clinical Advantages: Journal writing assignments can benefit students by enhancing reflection, facilitating critical thought, expressing feelings, and writing focused arguments. Journal writing can be adapted into a student's clinical course to assist with bridging the gap between classroom and clinical knowledge. In addition, journals can assist athletic training students with exploring different options for handling daily experiences.

Key Words: reflection, pedagogy, education

As athletic training students progress through their education, instructors hope that their students have time to not only retain but also to reflect on the knowledge learned. Reflection has been defined as a process regarding thinking about and exploring an issue of concern, which is triggered by an experience.¹ Leaver-Dunn et al² stated that reflection distinguishes expert practitioners from their peers. An expert clinician uses information from previous experiences as well as the insights gained from the reflective process to improve decision-making ability. As students progress through their education, they must practice, enhance, and habitually use their reflection skills. Leaver-Dunn et al² stated that athletic training educators should seek to facilitate a student's reflection. Although many strategies exist to promote this process, one teaching method that has been used to encourage reflection is journal writing.³⁻¹¹ The purpose of this article is to discuss journal writing as a pedagogic technique to promote reflection. I first briefly discuss the process of reflection and the research related to journal writing and then offer strategies for implementing journal writing in an athletic training education curriculum.

PROCESS OF REFLECTION

Once a student has knowledge and becomes proficient at a skill (ie, evaluating an ankle injury), that student possesses *knowing-in-action*.¹² Knowing-in-action refers to the "know-how" a practitioner reveals while performing an action. Simply put, the practitioner shows competency, or that he or she knows how to perform an orthopaedic assessment, by displaying the appropriate actions. Knowing-in-action assists a stu-

dent except when a familiar routine produces an unexpected result. Take an example of a senior-level student who has performed various patellofemoral examinations but, during a recent evaluation, had inconclusive results. A student in this situation can become very frustrated. When students come across a new situation such as this, it would be beneficial for them to *reflect-on-action*, or reflect on that experience after it has happened. Unfortunately, more often than not, no time is designated for students to engage in the activity of reflection. Athletic training educational programs are encouraged to not only foster knowledge in students but also to cultivate reflection to enable our students to learn from past experiences.

An expert practitioner experiments on the spot with previous data or engages in what is called *reflection-in-action*.¹² Reflection-in-action occurs when an individual reshapes what he or she is doing while doing it. Students, who do not possess an array of previous experiences from which to draw, are not able to reflect-in-action as can skilled practitioners. We hope that as they progress through their education, students will learn to practice, enhance, and learn to habitually use their reflection-in-action skills. Although many strategies exist to facilitate reflection, one teaching method that has been extensively used is journal writing.³⁻¹¹ The examples of the reflective processes cited above refer to Schon,¹² but interested readers can also consult Powell¹³ and Mezirow¹⁴ for additional processes.

No true definitions of journal writing exist due to the vast number of ways journal writing can be used. In the literature, journal writing is described and explained in many different ways. For the purposes of this article, journal writing refers to any writing that students perform during either a clinical or

classroom experience that challenges them to reflect on past situations, as well as consider how they might perform differently should similar situations arise in the future. The goal of any journal writing assignment should guide the written content for the student. For example, a student could reflect on the challenges of designing and administering a rehabilitation program as part of a rehabilitation course. Students can also return to their struggles with matters such as professionalism during any aspect of their clinical experiences. Both assignments encourage the student to reflect on an experience, whether that experience be from classroom content or their clinical experiences.

Journal writing has been used with nursing,^{4,5,8,11} physical therapy,^{9,15} occupational therapy,⁷ and teacher certification^{16,17} students. The journal writing topics for this teaching method can range from reflecting on daily clinical experiences (eg, assessments and rehabilitations performed) to summaries of weekly clinical experiences. Widely used, journal writing has been recognized as a method designed to enhance reflection,³⁻¹¹ facilitate critical thought,¹⁸⁻²² express feelings in writing about problems encountered during clinical experiences,^{5,23} and practice writing summaries, objectives, and focused arguments.²² Because of these benefits, educational writing in a clinical journal is a common assignment in nursing programs.^{22,23} However, information for the athletic training educator in various teaching methods, including journal writing, is lacking.

JOURNAL WRITING RESEARCH

Most of the research involving journal writing has been qualitative in nature, with the journal entries analyzed for trends. Davies³ found that in the process of journal writing, students moved from being passive to active learners during their clinical debriefing sessions. Students would come to debriefing sessions with problems or clinical issues partially solved and look to the debriefing sessions for further input and validation. This type of paradigm shift was also reported by Sedlack,²⁴ who found that journal writing aided in placing responsibility with the student for active engagement and self-directed learning. In addition, the students' self-confidence increased because the journals enabled them to identify their own lack of motivation.²⁴

Recently, Williams and Wessel¹⁵ used reflective journals with physical therapy students studying chronic musculoskeletal conditions to obtain feedback regarding their learning. Students moved through a "fix-it" mentality to a more client-centered disability focus. Over the course of the 8 weeks, interactions with patients changed students' attitudes and increased students' knowledge about chronic disease.

In another qualitative study, Ritchie²⁵ reported that after completing 7 weeks of weekly journal entries, physical therapy students were provided with many opportunities for both the student and faculty member to give feedback, ask questions, and offer ideas for further reflection. In addition, bonds of trust were formed, not only between the student and faculty member, but among the students themselves as they learned to begin to trust themselves and the decisions they made. Last, students valued being able to ask the faculty member questions and receive validation without exposing their own perceived weaknesses to their peers. Ibarreta and McLeod⁵ also found this need for feedback. Nursing students using journals wanted

more feedback and direction from the instructor to gain more confidence regarding decisions made during their practicum.

Wong et al¹¹ used dialogue and journal writing to assess a system for test coding the level of any reflection. Each student wrote a reflective paper after developing a teaching plan and then carried out that teaching plan at the clinical assignment. A coding scheme was developed to analyze the reflective papers. Students were categorized as nonreflectors, reflectors, or critical reflectors. Of the 45 students in the study, 34 demonstrated reflection and were able to relate their experiences and turn them into new learning opportunities.

In a similar study,¹⁰ during 2 semesters, each student engaged in dialogue 5 times and wrote 4 journal entries in addition to a reflective paper. (Not described were the specific data analysis methods and the specific breakdown of nonreflectors, reflectors, and critical reflectors.) Students moved from a more narrative or descriptive writing style (nonreflector) to expressing frustration and offering solutions to problems (critical reflector). It was felt that journal writing and dialogue were essential to student learning.

JOURNAL WRITING PROCESS

Journal writing can have many different applications based on the goals of the instructor and student. One common use of journal writing is to promote reflection and thought through one-on-one dialogue between the student and instructor. Brown and Sorrell²² stated that a clinical journal provides guided opportunities for students to "think aloud" on paper and reflect on their own perceptions or understandings of the situations encountered in their practicums. Hahnemann²⁰ felt that journal writing assignments encourage exploration and risk taking on the part of the student. Before trying solutions to problems in real life, the student can be creative and express feelings and frustrations on paper. Ibarreta and McLeod⁵ reported that their students, through journal writing, were expected to apply knowledge gained from prior classroom content and literature relevant to their clinical experiences. Recently, reflective journals⁷ were used to emphasize connecting clinical content with thought process and self-awareness.

Holmes²³ stated that by recording and describing experiences, feelings, and thoughts, students are able to recreate their experiences for additional exploration. A student who had a difficult encounter with a student-athlete could write in the journal about the situation and think about what happened. He or she could describe why decisions were made and actions taken, along with feelings and future thoughts and directions. As educators, we must push our students to reflect more deeply. Pushing students to continuously ask themselves why a decision was made or why they feel the way they do about a topic or situation will cause them to look deeper for answers. Why did they perform a certain special test? Why was ultrasound used in the treatment of that injury, and how will that ultrasound affect the inflammation process? What changes could be made to this patient's treatment or future encounters with a specific injury? Davies³ stated that journal writing provides students with an opportunity to return to their experiences in an attempt to develop new perspectives that can guide future clinical actions. For example, a student, after performing a knee examination and discussing it with the Approved Clinical Instructor, could later write about the entire experience. What would he or she do differently? What did he or

she learn? Writing encourages and provides an opportunity for students to reflect on an experience, connect, and think critically about ideas or situations.

Dialogue Between Instructor and Student

As stated previously, journal writing provides a one-on-one dialogue between the instructor and student.²³ Wong et al¹¹ suggested that instructors and students are partners in the promotion of reflective learning. This dialogue, facilitated by the instructor, should be designed to challenge the student to reflect on his or her experiences. A student who has accomplished a goal or had a positive rehabilitation experience with a patient is allowed to share that information. In addition, this dialogue can also assist with conflicts in a confidential manner. For example, a student could reflect in the written journal about a difficult situation with a coach. Upon reading the journal, the instructor may provide feedback and ask questions, which will ideally push the student to think about future decisions if again faced with a similar situation.

Not only does this one-on-one dialogue assist in challenging the student, but also students valued the feedback to validate their thoughts on new endeavors.^{25,26} Because students are unfamiliar with dealing with coaches, let alone being involved in professional conflict, they may be limited in what they perceive as actions and solutions. This unfamiliar problem can leave students feeling that they have no control or power in the situation.

Although students may experience cognitive dissonance when engaging in a written dialogue about a challenging experience they had, the discourse can facilitate different ways of thinking²⁷ and empower students to handle themselves differently after reflection in the future.²⁸ Through one-on-one dialogue, students are empowered to not just leave future encounters and experiences to fate. Instead students, after reflection, have thought about their actions and how they would handle themselves or the situation differently in the future, which is reflection-for-action.²⁸ Reflection should be encouraged and enhanced through one-on-one dialogue via the journal writing process. The journal writing process, however, should be well planned and have explicit student expectations.

EXPECTATIONS AND PLANNING

Before assigning journal writing, the instructor must convey to the students all expectations with regard to completing and grading the journals.^{22,29} Table 1 presents many questions that should be asked when contemplating whether to assign journal writing. These questions will provide focus to enable the student to concentrate on the writing and not feel insecure about how the instructor will grade the journal. As stated by Kobert,²⁹ every effort should be made to ensure that the journal writing is seen as nonthreatening and satisfying. Identifying expectations before starting the first journal will prevent some confusion. It is also imperative for the instructor to consider many facets of the journaling process. The following section discusses factors to consider when planning for the use of journals, including setting student expectations, identifying appropriate topics, journal utilization strategies, and grading systems.

Journal Utilization Techniques

Depending on the method of use (daily, weekly writing) and

Table 1. Expectations of Instructor

What is the purpose of the journal?	Critical thinking, reflection, affective awareness, personal goals, increase confidence, etc
What is the expected format of journals?	Handwritten free form, typed, full sentences required
On what will the students write?	Assigned topics, daily clinical and/or field experiences, decided by students
How much writing is required?	Page limit, word limit, paragraph limit
When will the journals be due?	Weekly, biweekly, monthly, set day of the week
How will the students be given feedback?	Written into the journal, a feedback instrument, conferences with instructor
When do the students need to pick up the journals?	Next day, set number of days after being turned in, or when meeting with the instructor
How will students be graded?	Pass/fail, a grading instrument
Who will read the journals?	Instructor who assigns them, shared with other instructors

Table 2. Potential Journal Topics

Topic	Subtopics
Classroom experiences	Learning goals Difficult concepts to understand Summaries of day's lesson
Clinical experiences	Classroom, laboratory, athletic training room Rehabilitation experiences Assessment experiences
Field experiences	On-the-field assessment experiences Observations Interactions with coaches, patients, peer students, and Approved Clinical Instructor
Communication	Patients, athletes, coaches, fellow athletic training students
Personal goals	Confidence level, personally and with athletic training skills Time management Career aspirations and goals

the journal's purpose (to enhance critical thinking, promote reflection, etc), the way in which journal writing is used can take many different forms. Table 2 presents general topics followed by subtopics for possible student assignments in the classroom or clinical education setting. These topics can vary depending on the level of student, classroom content, location and type of clinical experience, and deficiencies or needs of the student. Topics may be decided solely by the instructor or through more egalitarian methods with the students' input. Burnard³⁰ stated that one democratic method of determining topics for journal writing is to discuss this with the class. Pre-assigned or spontaneous topics could also be used. The advantage of preassigned topics is that the student is aware of the topic and can be thinking about it before writing. On the other hand, some students may have certain spontaneous experiences during their clinical education about which they

wish to write. It is important for instructors to experiment with students and classes to determine which methods encourage reflection in students. Some classes as a whole may elect to use journal writing with the spontaneous method.

Spontaneous topics and experiences can include incidents that interest or concern students during their clinical placements. Unfortunately, due to uncontrollable factors, some students may find this method less challenging than preassigned topics and want to change the method of their journal writing. Journal writing should be viewed as experimental and as a work in progress or a process by which students learn to reflect and, we hope, move from reflection-in-action to reflection-for-action. Simply, the goal is for students to evaluate their actions and reflect on how they could handle the situation differently in the future. Instructors should be ready to adapt the journal writing experience to enhance assignment goals, whether they are reflection, learning, etc.

Journal writing can be time consuming for the student, so one way to show that this writing is valued is to allot some classroom time for the students to write. Hahnemann²⁰ reported using journal writing for 10 to 15 minutes of each class. Students were asked to write about what they expected to learn from class that day, as well as what had been learned from previous classes. Although allocating 10 to 15 minutes of class time for this purpose may not be feasible in a 50-minute class period, this method could be adapted to 2 to 3 minutes every class period or whatever fits the instructor's schedule.

Brown and Sorrell²² assigned students to write in their journals during class about difficult concepts or summarize a discussion or argue for or against a treatment. Physical therapy students were assigned to write about at least one learning event that occurred in their clinical placement.⁹ Burnard,³⁰ who assigned weekly writings under 6 headings from which students could choose, also used this type of weekly writing. Pinkstaff²⁶ asked nursing students enrolled in a public health class to write in their journals on individual topics related to class each week. Qualitative analysis revealed that the students not only improved in the creativity of their writing but the quality of their essay writing skills.

When completing some journal assignments, students should be allowed to write using a freeform style.^{20,31} Although this seems nontraditional, it is important to remember that if the focus is on the thought process, then grammar and punctuation should not be a part of the evaluation of the journal. If the focus of the journal is to reflect, then the journal should be a forum where students can write and not worry about punctuation, grammar, and spelling. As stated by Hahnemann,²⁰ journals are a means by which students should be allowed to experiment and test their wings. Focusing too much attention on grammar and punctuation may lead a student to misinterpret the purpose of the journal writing activity. Instead, the attention should be on the content of what is written and not how it is written. Additional information on grading and feedback is discussed later.

Journal Content and Format

Burnard³⁰ felt that no guidelines should be given regarding the amount that is written under each heading or journal topic, because it was felt this would be overstructuring; however, students were encouraged to provide regular journal entries for each given topic. Instead of a student's writing about a given topic one time over the course of a week, the student could

be encouraged to write after each clinical experience or several times during that week. Brown and Sorrell²² felt that the maximum length for assignments, such as summaries or critiques, should be 1 to 2 pages. Each instructor must decide what is appropriate for his or her purpose, and students must realize that content is more important than word count. Instructors should also realize that motivation is a factor in journal writing. Paterson³¹ pointed out that students are not always interested in all aspects of their clinical experiences, so instructors should not expect all journals to be of the same quality. Some weeks, the student might only meet the basic requirements, whereas in other weeks, the student may write profusely. Different clinical experiences provide more education and invoke more passion than others. The instructor has to decide, based on the goals and objectives of the assignment as well as the clinical experience during a given time frame, the quality and length of journal writing.

Students should also be given instructions as to how and when to turn in and pick up their journal entries. Specific guidelines should be in place that will enable the student to properly submit and collect the journal entries. For example, one guideline may be to have the students collect their journals every Monday by 12:00 PM and to submit them every Friday by 12:00 PM. Another would be to have them submitted during one class period and, after grading, handed back to the students during the next class period. Lastly, other questions must be considered, such as where and how to submit the journal entries (eg, mail box versus e-mail).

JOURNAL GRADING

Jackson³² and Pinkstaff²⁶ stated that the single most important factor in the successful use of journaling is allowing the journal to be a safe space for free expression. How can a student be graded for writing about feelings and reactions to specific issues and topics? How do we know he or she is really trying to reflect? Although they should be graded for their thoughts and feelings, it is important the students be informed²² as to how the journals will fit into their grades. What percentage of their grade will be affected by their journal writing? How will they be graded? Brown and Sorrell²² suggested a method of grading by which if the student achieves all the goals for the journal, then he or she earns an A or passes that portion of the class the journal fulfills. Hahnemann²⁰ and Williams et al⁹ weighted the journals as 10% of a grade in a course. Hahnemann²⁰ stated this was done because they felt it would motivate the students to write thoroughly and with meaning. Tryssenaar⁷ reported weighting the journals as 20% of the final grade. However the instructor chooses to integrate journal writing into a course, unless the journals have an effect on the grades, students will put very little effort into their writing.²⁰ Adding a grade to the journals puts value to them and establishes their importance. Although 10% to 20% of a grade has been reported in the literature, it is up to the individual instructor to weight the journals accordingly or in some way to ensure that students feel the journal writing assignments matter and are of significant value. These journals can be a commitment for the student as well as the instructor, but they can potentially provide valuable insight and reflection. The strength of journal entries is related to the students' motivation to engage and participate in their own learning processes.⁸ If a student is motivated and active in learning, the process will be seen as an investment instead of time consuming. Wong et al¹¹ found that willingness, commitment,

Table 3. Sample Instructor's Feedback Comments

How did you form this opinion?
Why do you feel this way?
Where did you learn this information?
How did you know this was the right treatment/action?
Did you consider other ways of handling this situation?
How often have you thought about this issue?
What other avenues could you have pursued to handle this situation?
How will you handle this in the future?
Why do you feel he/she used this treatment?
Why did you not agree with this form of treatment or rehabilitation?
What steps will you take to assist yourself in your next assessment of ___?

and open mindedness were attributes that were conducive to reflective learning.

Determining the level of reflectivity is beyond the scope of this manuscript. However, Atkins and Murphy³³ outlined 3 stages of the reflective process that can be used when grading. Stage 1 is triggered by awareness of uncomfortable feelings. The student realizes that knowledge being applied in this situation is not sufficient in and of itself to explain the situation. For example, a student is using ultrasound treatments for tendinitis, but the treatment is producing no therapeutic effect. The student is unsure as to why this is happening and expresses frustration. The second stage is characterized by a critical analysis of the situation. This involves feelings and knowledge, so that new knowledge is applied. Four terms were used to describe this critical thought process: association, validation, integration, and appropriation. The development of a new perspective on the situation is stage 3. The outcome here through learning is reflection. These 3 stages can be a guide when grading a student's written journal entry to determine the level of reflectivity of the student. Educators interested in researching other tools with which to evaluate or grade journals are encouraged to consult the following papers and other works.^{8,24,34}

JOURNAL FEEDBACK

After writing their first journal entry, students should receive feedback before writing the next entry.²² One of the most challenging tasks with journal writing is evaluating the student's written work.²⁰ Judgment and criticism are withheld. Instead, the attempt to write on the student's part is more important than the success of the attempt.²⁰ Brown and Sorrell²² agreed to provide 1 to 2 comments about the overall journal. The thought of not providing numerous comments is echoed by Holmes,²³ who stated that when the focus of feedback is detailed, the students lose their sense of purpose and meaning in the writing. Students will shift their focus from constructing a sense of what they are trying to say into worrying about grammar and sentence structure. Table 3 provides some sample follow-up questions that can be used to challenge and encourage students to think and reflect. In addition, as stated by Paterson,³¹ a balance must be maintained between giving too many comments and nudging the student into new ways of thinking. Correcting misinformation written by the student is encouraged, but no criticism or judgment should be made of the student's feelings. Annotations might pertain to future questions and comments to expand on in the next journal entry, but the instructor needs to try to avoid excessive grammar and spelling corrections.

Feedback can be given in various ways. Brown and Sor-

rell²² reported using both oral and written feedback. Conferences, also known as debriefing sessions, either individual or group, can be set up to discuss the clinical journal's relationship to reflection, critical thinking, etc. The student and instructor sit down together to discuss the journal along with feedback goals for upcoming writings. In addition, group discussions^{8,15,22} at the beginning of a practicum and/or throughout can conserve faculty time, promote the exchange of ideas, and help synthesize information for students. Another way to conserve faculty time is to only grade at random a percentage of the journals that are written after a few weeks of feedback has been given. All of these types of feedback have strong points and limitations. It is up to the instructor to decide what is appropriate and to modify as needed. Last, if a student inquires as to why or how the journal was graded, it is important for the instructor to be able to explain all comments and methods of grading. These grading points are not only justification but can help guide the student to further reflection.

As stated by Riley-Doucet and Wilson,⁸ one of the limitations of this type of assignment is the student who procrastinates and doesn't take responsibility for coursework. When a student exhibits this type of behavior, it should be recognized by the instructor and discussed with the student. The student should be given the benefit of the doubt as to the procrastination, and the instructor can approach the student from the perspective that the student is lacking knowledge about reflection and journal writing. Riley-Doucet and Wilson⁸ recommended pairing this student with a peer who is comfortable with the journal writing. If this is not possible, another recommendation is to establish small short-term goals for upcoming journal writings, such as considering specific questions when writing the journal. These short-term goals and guiding questions can assist the student in the reflective process.

Examples of questions include the following:

- How would I have done this differently?
- Why did I choose to perform the skill the way I did?
- What was my reasoning in handling that situation that way?

Journal writing is a process, and students may not put much effort into their writing in the beginning. For some students, it will be easy to express their feelings and frustrations. Other students may struggle. Instructors should take into account individual personalities when providing feedback. In addition, the students need to be reminded that the journal writing is a process that takes time. It may take weeks or longer for a student to feel comfortable and trust the instructor. Feedback is a vital aspect in nurturing reflection over time, as the journal writing progresses over weeks and possibly years.

TRUST

As stated by Kobert,³⁰ one drawback to journal writing is what makes it so valuable. Students may be reluctant or unable to explore and share intimacies of their own lived experiences with others. They may be more concerned with writing what they think the instructor wants to hear than writing about what is true to them. Writing about issues and feelings puts the student in a very vulnerable position. To promote reflection, he or she must express weakness and insecurity to grow. Students must feel comfortable exposing this vulnerability. Holmes²³ noted the significant responsibility of both the student and instructor to accept differing views while searching for understanding and meaning. Part of encouraging this truth-

ful writing is not only through the previously mentioned feedback procedures but also by maintaining confidentiality to encourage truthfulness.¹⁹ If students are familiar with the instructor and know him or her to be nonjudgmental, they will, more than likely, be more willing to self-disclose in their journal writing. However, if the instructor is new to the students, they will need evidence that the instructor will remain true to his or her word before disclosing too much in a journal entry. Such trust takes time to develop, but if journal writing is seen as a work in progress, this is all part of the journey.

RECOMMENDATIONS

Additional research needs to be conducted investigating journal writing.^{4,15,33} Much of the journal writing literature in the allied health field ranges from specific articles about grading²³ and assisting with common problems or pitfalls³¹ to general guidelines for using journal writing.^{19,20,30} Although this information is useful and often written by professionals speaking from years of experience, more qualitative and quantitative research is needed. Specific research questions include the following:

- How does journal writing affect the learning of material?
- Does the type of feedback given to the student affect what is written in journal writing?
- How do students learn to reflect on their experiences?
- What variables affect the trust level between the instructor and student to enhance truthful writing?
- Does maturity affect journal writing and reflection?

CONCLUSIONS

The purpose of this article was to provide an introduction to the process of journal writing to promote reflection. Our students, on a daily basis, encounter experiences that can teach them to reflect during their future practice of athletic training, and we owe it to our students to facilitate their reflection. Course preparation is short in relation to career practice; therefore, as educators, we hope to instill reflective qualities that mature and grow.

Many methods of assigning and grading journal writing were presented in this article. As with any teaching method, there is no right or wrong way to approach journal writing. As the students grow in self-confidence and gain trust in the instructor, they begin to reflect and write about their real concerns. This leads to obtaining valuable feedback to empower our future certified athletic trainers to overcome those real-life concerns. Reflection is the goal, as everyone is rewarded—the student, the patient, the coach, and the instructor. Reflection enables the student to do a better job as a certified athletic trainer. Isn't our real goal to enable all of our students to give thought to their actions and perform with the utmost skill, knowledge, and confidence that they have done their jobs in the best possible manner?

REFERENCES

1. Boyd E, Fales A. Reflective learning: key to learning from experience. *J Human Psychol*. 1983;23:99–117.
2. Leaver-Dunn D, Harrelson GL, Martin M, Wyatt T. Critical thinking predisposition among undergraduate athletic training students. *J Athl Train*. 2002;37(4 suppl):S-147–S-151.
3. Davies E. Reflective practice: a focus for caring. *J Nurs Educ*. 1995;34:167–174.
4. Fakude LP, Bruce JC. Journaling: a quasi-experimental study of student nurses' reflective learning ability. *Curationis*. 2003;26:49–55.
5. Ibarreta GI, McLeod L. Thinking aloud on paper: an experience in journal writing. *J Nurs Educ*. 2004;43:134–137.
6. Kessler PD, Lund CH. Reflective journaling: developing an online journal for distance education. *Nurse Educ*. 2004;29:20–24.
7. Tryssenaar J. Interactive journals: an educational strategy to promote reflection. *Am J Occup Ther*. 1995;49:695–702.
8. Riley-Doucet C, Wilson S. A three-step method of self-reflection using reflective journal writing. *J Adv Nurs*. 1997;25:964–968.
9. Williams RM, Wessel J, Gemus M, Foster-Seargeant F. Journal writing to promote reflection by physical therapy students during clinical placements. *Physiother Theory Pract*. 2002;18:5–15.
10. Wong FKY, Kember D, Chung LYF, Yan L. Assessing the level of student reflection from reflective journals. *J Adv Nurs*. 1995;22:48–57.
11. Wong FKY, Loke AY, Wong M, Tse H, Kan E, Kember D. An action research study into the development of nurses as reflective practitioners. *J Nurs Educ*. 1997;36:476–481.
12. Schon DA. *Educating the Reflective Practitioner*. San Francisco, CA: Jossey-Bass Inc; 1987.
13. Powell JH. The reflective practitioner in nursing. *J Adv Nurs*. 1989;14:824–832.
14. Mezirow J. A critical theory of adult learning and education. *Adult Educ*. 1981;32:3–24.
15. Williams RM, Wessel J. Reflective journal writing to obtain student feedback about their learning during the study of chronic musculoskeletal conditions. *J Allied Health*. 2004;33:17–23.
16. Carter CW. The use of journals to promote reflection. *Action Teach Educ*. 1998;19:39–42.
17. Dart BC, Boulton-Lewis GM, Borwnlee JM, McCride AR. Change in the knowledge of learning and teaching through journal writing. *Res Papers Educ*. 1998;13:291–318.
18. Abegglen J, O'Neill Conger C. Critical thinking in nursing: classroom tactics that work. *J Nurs Educ*. 1997;36:452–458.
19. Degazon CE, Lunney M. Clinical journal: a tool to foster critical thinking for advanced levels of competence. *Clin Nurse Spec*. 1995;9:270–274.
20. Hahnemann BK. Journal writing: a key to promoting critical thinking in nursing students. *J Nurs Educ*. 1986;25:213–215.
21. Lashley M, Wittstadt R. Writing across the curriculum: an integrated curricular approach to developing critical thinking through writing. *J Nurs Educ*. 1993;32:422–424.
22. Brown HN, Sorrell JM. Use of clinical journals to enhance critical thinking. *Nurse Educ*. 1993;18:16–19.
23. Holmes V. Grading journals in clinical practice: a delicate issue. *J Nurs Educ*. 1997;36:489–492.
24. Sedlak CA. Use of clinical logs by beginning nursing students and faculty to identify learning needs. *J Nurs Educ*. 1992;31:24–28.
25. Richie MA. Faculty and student dialogue through journal writing. *J Spec Pediatr Nurs*. 2003;8:5–12.
26. Pinkstaff E. An experience in narrative writing to improve public health practice by students. *J Nurs Educ*. 1985;24:25–28.
27. Perry WG. *Forms of Ethical and Intellectual Development in the College Years: A Scheme*. San Francisco, CA: Jossey-Bass Inc; 1999.
28. Brown SC, Gillis MA. Using reflective thinking to develop personal professional philosophies. *J Nurs Educ*. 1999;38:171–175.
29. Kobert LJ. In our own voice: journaling as a teaching/learning technique for nurses. *J Nurse Educ*. 1995;34:140–142.
30. Burnard P. The journal as an assessment and evaluation tool in nurse education. *Nurse Educ Today*. 1988;8:105–107.
31. Paterson BL. Developing and maintaining reflection in clinical journals. *Nurse Educ Today*. 1995;15:211–220.
32. Jackson R. Approaching clinical teaching and evaluation through the written word: a humanistic approach. *J Nurs Educ*. 1987;26:384–385.
33. Atkins S, Murphy K. Reflection: a review of the literature. *J Adv Nursing*. 1993;18:1188–1192.
34. Sorrell JM, Brown HN, Silva MC, Kohlenberg. Use of writing portfolios for interdisciplinary assessment of critical thinking outcomes of nursing students. *Nurs Forum*. 1997;32:12–24.